

ment of differing covers or bases is accomplished by ensuring that the hinges of each are universal and readily match with a mating portion of a hinge on the base being assembled to the cover or visa versa. This ability to easily provide two or more different base units **16**, for example, one containing a half-height slot, another of a thinner variety requiring all or some so-called slim components and yet another being a thicker package that provides better cooling and/or an expansion slot, as well as two or more different sets of electronics of possibly different thicknesses in middle section **18**, allows for a full range of product configurations for economic development and manufactureability using a common tri-fold structure.

As further shown in FIG. 4, a computer unit **70** is illustrated as comprising a top assembly, including a display section **72** hinged to a middle or back section **76**, and a bottom assembly, including a base section **74**. A keyboard **77** is located on top of the base section **74** and can be removed for convenient usage.

FIG. 5 illustrates the computer unit **70** in a closed position and further illustrates the hinged arrangements of the middle or back section **76** to the display section **72** at hinge **80**, and to a base connecting assembly **86** at hinge **78**. Hinges **80** and **78** are only shown from the right side of the computer unit **70**, but it will be appreciated that complementary hinges are disposed on the opposite or left side of the computer unit **70**. Further, it should be appreciated that the hinge **80** and its complementary hinge at the opposite end, can be positioned at any of a number of locations or attitudes on the back side of the display section **72**. So, for example, even though the illustrated hinge **80** is at the upper end or approximate top of the back side of the display section **72**, in order to provide a different articulation for the display section **72**, the hinges could be disposed farther down the back side of the display section **72** and, for example, could be disposed at or near the bottom of the back side of display section **72**, even to the point where hinge **80** is not necessary and the hinge **78** could be directly connected to the display section **72**.

The base connecting assembly **86** provides structural support along the width of the computer unit **70** and has leg portions **88** and **90** on the right and left ends of the base connecting assembly **86**, respectively. The base connecting assembly **86**, including its legs **88** and **90**, is configured for insertion into the accommodating slot **92** on the upper surface of the base section **74**, as illustrated in FIG. 4. To ensure insertion to a full and proper depth, exemplary, locking and locating bump-like protrusions **94** and **96** are formed on leg portions **88** and **90**, respectively. When the legs **88** and **90** are inserted into the slot **90**, they are pushed down in the direction of arrow **98** until such time as the protrusions **94** and **96** are within accommodating recesses (not shown) in the base section **74** at each end of and within the slot **90**. Proper insertion will, for example, be accomplished when the protrusions **94** and **96** snap into the identified recesses. Also when insertion at the proper depth is accomplished, a satisfactory electrical connection will have been made between the mating electrical part **82**, in the base connecting assembly **86**, and the mating electrical part **84**, in the base section **74**, of the illustrated electrical connector. When the assembly is completed, positive electrical continuity is achieved. Other methods of achieving connection and positive electrical continuity are possible. It will be appreciated that appropriate electrical connection is made between the pivotable back section **76** and the electrical part **82** to electrically connect components in the back section **76** and in the display section **72**.

With the facility of easily changing the top portion of the computer unit **70**, or the bottom portion, as provided herein,

it will be appreciated that a myriad of possible applications and computer features can be experienced by the user without undue burden of a bulky system. Further, the user can selectively choose which assembly combinations are best suited for the user's purpose and can make these choices in the most economical manner.

Although the present invention and its advantages have been described in detail, it should be understood that various changes, substitutions and alterations can be made herein without departing from the spirit and scope of the invention as defined by the appended claims.

What is claimed is:

1. A computer system assemblage comprising:

a base section assembly having a keyboard,

a planar middle section assembly connected to rotate and to be detached from the base section assembly with a first hinge assembly having a first longitudinal axis of rotation for rotation of the planar middle section assembly relative to the base section assembly and with an attachment structure for matably connecting to and for detaching from the base section assembly, and

a planar display section assembly, including a display screen, pivotally connected to the planar middle section assembly with a second hinge assembly having a second longitudinal axis of rotation which second longitudinal axis of rotation is parallel to the first longitudinal axis of rotation for rotation of the planar display section assembly relative to the planar middle section assembly.

2. The computer system assemblage as defined in claim 1, wherein the three section assemblies can be folded flat such that the display section assembly is sandwiched between the middle section assembly and the base section assembly and that all three of the section assemblies form generally parallel planes.

3. The computer system assemblage as defined in claim 1, wherein the three section assemblies are foldable to form a generally triangular shape when viewed in cross section with the base section assembly forming the base of the triangle, and the middle detachable section assembly and the display section assembly forming the other two sides of the triangle, including registration means to temporarily retain one edge of the display section assembly at one of many possible locations along the depth of the base section assembly to provide for stability for the triangular shape and registration of the display section assembly at any one of the many possible locations along the base section assembly, wherein the shape of the triangle varies when viewed in cross section as a function of the location of the registration means along the depth of the base section assembly.

4. The computer system assemblage as defined in claim 3, further comprising a device for temporarily retaining one edge of the display section assembly at one of many possible locations along the length of the base section assembly.

5. The computer system assemblage as defined in claim 3, wherein the registration means comprises a pin assembly attached to the planar display section assembly and includes a pin for engaging the base section along a guide rail formed as a part of and disposed along the depth of the base section assembly.

6. The computer system assemblage as defined in claim 5, wherein the pin of the pin assembly engages depressed formations in the guide rail formed as a part of the base section assembly.

7. The computer system assemblage as defined in claim 5, wherein the pin of the pin assembly matingly engages a material included as a part of the guide rail, to displace the